

**ACCESSING MAIN ATX OUTPUTS
WITHOUT MONITORING ALL OUTPUTS**

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ABSTRACT

10 A power monitor circuit and method delays the start of a computer until multiple
power lines are at a safe level of operation. The integrated circuit monitors only the voltage of
a primary power supply output and eliminates the need for monitor circuits on each supply
output. The power supply is made to exacting specifications that tie the 5 volt and 3.3 volt
supplies to the primary 12 volt supply. The ATX power supply drives the 3.3 and 5.0 supplies
to reach 90% of their values within 40 ms after the 12 volt supply reaches 90% of its value. A
time delay circuit 25 delays switching the 3.3 and 5 volt dual outputs from the standby voltage
supply to the active voltage supplies until after the primary 3.3 and 5 volt are at a safe
operating level.

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